

HURST-ROSCHÉ ENGINEERS, INC.

PROJECT: TR 557 over BNSF Railroad

COMPS FOR: Structure Cost Estimate

JOB CODE: 130-0306

DESIGNED: JLG **DATE:** 10/24/2006

CHECKED: JSP **DATE:** 9/24/2008

UPDATED: RVB **DATE:** 10/14/2010

ROADWAY QTY.'S BY: JJC **DATE:** 10/13/2010

REVISED TO INCLUDE CONC. PARAPET & THROW FENCE (yellow): RVB **DATE:** 10/26/2010

Construction Cost - Bridge (1-Track, 3-Span, L = 129')

Code #	Item	Units	Quantity	Unit Cost	Cost
20700220	Porous Granular Embankment	Cu Yd	43	\$52.00	\$2,236
50100100	Removal of Existing Structure	Each	1	\$5,000.00	\$5,000
50200100	Structure Excavation	Cu Yd	48	\$20.00	\$960
50300225	Concrete Structures	Cu Yd	39.3	\$650.00	\$25,545
50300255	Concrete Superstructure	Cu Yd	29.3	\$900.00	\$26,370
50300280	Concrete Encasement	Cu Yd	32.6	\$600.00	\$19,560
50400405	Precast Prestressed Concrete Deck Beam (21" Depth)	Sq Ft	3900	\$55.00	\$214,500
50800105	Reinforcement Bars	Pound	6500	\$1.60	\$10,400
50900205	Steel Railing Type S-1	Foot	0	\$90.00	\$0
50901730	Bridge Fence Railing	Foot	263	\$150.00	\$39,450
51201600	Furnishing Steel Piles HP 12X53	Foot	1000	\$50.00	\$50,000
51202305	Driving Steel Piles	Foot	1000	\$1.00	\$1,000
51203600	Test Pile Steel HP 12X53	Each	1	\$9,000.00	\$9,000
51500100	Name Plates	Each	1	\$350.00	\$350
58300100	Portland Cement Mortar Fairing Course	Foot	1170	\$4.00	\$4,680
Total =					\$409,051

Construction Cost - Approach Roadway

Code #	Item	Units	Quantity	Unit Cost	Cost
20200100	Earth Excavation	Cu Yd	20	\$20.00	\$400
20400800	Furnished Excavation	Cu Yd	2500	\$20.00	\$50,000
25001000	Seeding, Class 2 (Special)	Acre	0.2	\$3,000.00	\$600
25100630	Erosion Control Blanket	Sq Yd	650	\$3.00	\$1,950
28000250	Temporary Erosion Control Seeding	Lb	40	\$8.00	\$320
28000400	Perimeter Erosion Barrier	Foot	330	\$1.50	\$495
40200800	Aggregate Surface Course, Type B	Ton	997	\$25.00	\$24,925
40300100	Bituminous Materials (Prime Coat)	Gal	1186	\$5.50	\$6,523
40300300	Bituminous Materials (Cover & Coat)	Gal	2373	\$4.00	\$9,492
40300500	Cover Coat Aggregate	Ton	29.7	\$80.00	\$2,376
40300600	Seal Coat Aggregate	Ton	29.7	\$80.00	\$2,376
63100085	Traffic Barrier Terminal, Ty 6	Each	4	\$3,000.00	\$12,000
63100167	Traffic Barrier Terminal, Ty 1 (Special) Tange	Each	4	\$2,500.00	\$10,000
67100100	Mobilization	L Sum	1	\$5,000.00	\$5,000
70101700	Traffic Control & Protection	L Sum	1	\$10,000.00	\$10,000
Total =					\$136,457

Construction Cost-Detour

Code #	Item	Units	Quantity	Unit Cost	Cost
20200100	Earth Excavation	Cu Yd	400	\$20.00	\$8,000
20100500	Tree Removal, Acres	Acre	5	\$12,000.00	\$57,600
25000200	Seeding, Class 2	Acres	1	\$3,000.00	\$1,500
28000250	Temporary Erosion Control Seeding	Lb	100	\$8.00	\$800
28000400	Perimeter Erosion Barrier	Foot	3000	\$1.50	\$4,500
40200800	Aggregate Surface Course, Type B	Ton	1268	\$25.00	\$31,689
542D0223	Pipe Culverts, Class D, Type 1 18"	Foot	142	\$50.00	\$7,100
---	Removal of Existing Crossing	Foot	18	\$1,400.00	\$25,200
---	Installation of Grade Crossing - Upgrade	L Sum	1	\$40,000.00	\$40,000
Total =					\$176,389

Estimated Construction Cost = \$721,897

Miscellaneous

Code #	Item	Units	Quantity	Unit Cost	Cost
---	Land Acquisition	Each	0	\$0.00	\$0
---	Construction RR Flagging	Each	1	\$60,000.00	\$60,000
---	Preliminary Engineering	Each	1	\$57,800.00	\$57,800
---	Construction Engineering	Each	1	\$43,300.00	\$43,300
---	Materials Testing	Each	1	\$5,000.00	\$5,000
---	Lawyer's Fee	Each	1	\$10,000.00	\$10,000
Total =					\$176,100

Total Estimated Cost = \$897,997
